EXHIBIT 6

EAGAR LLC
138 Claflin Street
Belmont, MA 02478
617-253-3229
Eagar@MaterialsEng.com

Member of
MEG

Materials and Engineering Group LLC:
• M.C. Balmforth, MS, PE, CWI
• S.C. Bellemare, PhD, PE
• T.W. Eagar, ScD, PE
www.MaterialsEng.com

November 19, 2012

Law Offices of Stephen R. Paul, PLLC
P. O. Box 16099
Chapel Hill, North Carolina 27516

Attention: L. Skye MacLeod

RE: State Farm Fire and Casualty Company, a/s/o
Christopher Taylor v. Louisiana Pacific Corporation

Dear Ms. MacLeod,

At your request, I have reviewed the reports of Goodson Engineering and ESI in the above referenced matter, wherein it is claimed that the Louisiana Pacific TechShield Radiant Barrier "does not assure or increase the likelihood that a fire will occur in the eventuality that a residential structure is struck by lightning" [ESI report, p.10] and "LP TechShield does not present an increased risk of lightning related fire when lightning strikes a home in which it is installed" [Goodson Engineering report, p.5]. It was requested that I evaluate the scientific bases for these opinions and whether the scientific methodology which was used was proper.

In performing my investigation, I reviewed the following materials:

1. Goodson Engineering report by Mark Goodson to Mr. Neil Ellis, undated.

2. ESI report by Dennis Scardino to Ellis and Anthony, undated.

3. Triad Associates, Inc. report by Dr. Gary M. Richetto, dated October 13, 2012.

4. Element Analytical reports by J. Robert McGraw, Jr. dated August 22, 2012 and November 6, 2012.

5. R.D. Simmons, E.M. Benstock, "A Strange New Source of Structural Fire Ignition."

6. P. Farrey, "Radiant Energy Transfer and Radiant Barrier Systems in Buildings," Florida Solar Energy Center Publication No. FSEC-DN-6-86.

7. NFPA 921 Sections 14.1 and 14.9 through 14.12.2.

8. "Reflective Radiant Barriers – Energy Saving Wonder or Disaster Waiting to Happen?," McDowell Owens Engineering, Kingswood, Texas.

9. RIMA International Technical Bulletin #108.

10. LP TechShield MSDS 11/08/07.

11. LP TechShield Installation Instructions 12/18/10.

12. LP TechShield Warranty.

13. Vaisala STRIKEnet report 328577 for August 29, 2011.

14. Intertek Test Report No. 100544731SAT – 001A dated October 31, 2011.

15, Stereomicrographs and SEM of copper wires performed at Goodson Engineering.

Based upon my investigation, training and education I have made the following observations and I have formed the following conclusions within a reasonable degree of engineering certainty.

1. Both the ESI report and the Good Engineering report expound at length that lightning can cause fires in residential structures. Based upon this discussion both reports conclude the LP TechShield does **not** increase the hazard of lightning causing a fire in a residential structure. There are several problems with this method of scientific inquiry.

   a. There is no data, test, experiment, literature, etc. provided that compares the hazard rate of lightning striking OSB versus lightning striking RBS. Thus, there is no basis for the conclusion that this hazard rate for OSB and RBS is the same. ESI and Goodson Engineering have merely stated their hypothesis as a conclusion without testing the hypothesis. This violates the scientific method as outlined in NFPA 921, Chapter 4.

This is the fallacy of a "question-begging epithet" [S.M. Engel, *Fallacies and Pitfalls of Language*, Prentice Hall, 1994, Chapter 11].

b. Both reports attempt to prove a negative, i.e. that RBS does **not** increase the hazard rate of OSB. Proof of a negative requires either considerable statistical data or eliminate of all potential alternatives. Neither the ESI or Goodson Engineering reports provide any statistical data comparing the hazard rate of RBS and OSB nor a thorough analysis of the potential fire ignition modes when lightning strikes these materials.

c. Both reports confirm that lightning causes fires and appear to agree that lightning caused this fire. Without any further analysis both conclude that RBS is equivalent to OSB. By claiming knowledge of how lightning ignites OSB, the ESI and Goodson Engineering attribute the same properties of OSB to RBS without any proof, connection or analysis. There is no nexus between the data they present for OSB products and RBS. This is the fallacy of a sweeping or hasty generalization [Engel, Chapter 8].

d. By focusing most of their reports on the fact that lightning can cause fires, ESI and Goodson Engineering have committed the "irrelevant thesis" fallacy [Engel, Chapter 16]. The question is not whether lightning can cause fires, but whether the presence of the aluminum foil increases the likelihood of a fire. There is no such analysis in either the ESI or the Goodson Engineering reports.

For all the reasons noted above, the methodology of both ERI and Goodson Engineering is scientifically flawed.

2. There is affirmative evidence from the Taylor residence that the aluminum on the LP TechShield melted [for example see photographs 19 and 23 of the Element Analytical report of August 22, 2012]. Melting of the aluminum foil over such large areas will produce aluminum beads of sufficient size to detach by gravity. The size of the drops are controlled by surface tension forces, gravity forces and any electromagnetic forces if electrical arcs are present [References 1 and 2]. If the melting is caused by resistive heating (as demonstrated by McDowell Owen tests on RBS), the temperature of the aluminum beads (drops) will be greater than the melting point (1200°F) and

less than the boiling point (3000°F). If the melting is caused by arcing, the temperature will be closer to the boiling point [Reference 3]. In either case, the temperature and size of the beads is sufficient to ignite nearby combustibles. Examples (evidence) of such ignition by molten metal beads is provided in NFPA 51B Standard for Fire Prevention During Welding, Cutting and Other Hot Work.

Thus, it is clear that RBS differs from OSB in that RBS can produce molten aluminum beads, whereas OSB, which does not contain aluminum cannot produce aluminum beads. On this basis alone LP TechShield RBS is most assuredly different than OSB, and these differences were observed by melting and beading of thealuminum foil on the RBS in the attic of the Taylor residence. RBS is more hazardous than OSB when struck by lightning because the aluminum can (and did) melt and the molten metal can drop by gravity onto highly combustible materials such as the Styrofoam vents that were immediately below the LP TechShield.

Photograph 23 from the Element Analytical report of August 22, 2012 confirms that the lightning produced arcing which led to melting of the aluminum foil on the LP TechShield. This photograph shows the steel exhaust vent penetrating the RBS with localized melting of the foil several inches distant from the penetration. Such arcing would be initiated by the localized contact between the foil and the exhaust vent [Reference 4] and the arc would have been sustained to a distance of several inches from the initial point of contact by the high voltages in the lightning event.

3. By placing a metal foil in the roof cover of the building, the manufacturer of LP TechShield created a poor man's Lightning Protection System (LPS). An LPS is a metallic shield (Faraday cage) which rearranges the static electric field created by the lightning storm [References 5 and 6]. Metallic conductors that reach above the house, such as the stainless steel chimney cap or the peak of an RBS roof, act as air terminals to attract the lightning. These principles are described in NFPA 780 and References 5 and 6. This ability to act as an air terminal is a feature of RBS that does not exist in OSB.

The problem is that the aluminum foil is too thin to act as a down conductor the lightning current to ground [NFPA 780 Table 4.1.1.1.1]. According to the NFPA, aluminum down conductors must be 1.63 millimeters thick, whereas the foil on the RBS is 0.01 mm thick or stated in the reverse, RBS is just too thin to serve as a down conductor in the LPS that is designed into the RBS by

the manufacturer. LP TechShield violates the known scientific requirements of NFPA 780. On this basis it is not fit for its purpose, whether that purpose was intentional or not. LP TechShield is a defective product.

CONCLUSION

The methodology used by ESI and Goodson Engineering to conclude that RBS and OSB do not differ in their response to lightning was scientifically flawed. The analyses presented herein concerning arcing and melting of the aluminum foil in the RBS during a lightning strike, as well as the propensity of the RBS to serve as an air terminal and a down conductor in an unintentional LPS, are based upon known scientific principles described in various NFPA documents. These principles demonstrate that RBS is indeed more hazardous than OSB when assaulted by lightning, contrary to the unsupported assertions of ESI and Goodson Engineering. While the extensive use of RBS is relatively recent and there is insufficient statistical data to establish the relative hazard rate of RBS versus OSB, the question with respect to the Taylor residence is whether the LP TechShield demonstrates the damage and the location with respect to the fire origin such that a reasonable person could conclude that the presence of the foil backing on the RBS contributed to the fire. Statistics are not possible, nor are they relevant to a single building. The proper question is whether the LP TechShield contributed to ignition of the fire at the Taylor residence. That is a factual question that must be determined by others.

Sincerely yours,

Thomas W. Eagar

Thomas W. Eagar

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THOMAS W. EAGAR

MIT, Room 4-136
77 Massachusetts Ave
Cambridge, MA 02139
Voice: (617) 253-3229
FAX: (617) 252-1773 (MIT)
tweagar@mit.edu

Home:
138 Claflin St.
Belmont, MA 02478
(617) 484-0571
FAX: (617) 484-3845

PROFESSIONAL INTERESTS:

Materials processing and manufacturing; special interests in welding and joining of metals, ceramics and electronic materials; deformation processing; alternate manufacturing processes; manufacturing management; materials systems analysis; selection of materials and failure analysis.

EDUCATION:

S.B. Metallurgy and Materials Science,
Massachusetts Institute of Technology, 1972
Sc.D. Metallurgy, Massachusetts Institute of Technology, 1975
--- Business Administration, Lehigh University, 1975-76
--- Program for Senior Executives, Sloan School of Management,
Massachusetts Institute of Technology, 1988

EMPLOYMENT:

Bethlehem Steel Corporation
Homer Research Laboratories
Research Engineer, 1974-1976
Massachusetts Institute of Technology
Department of Materials Science and Engineering
Assistant Professor of Materials Engineering, 1976-1980
Associate Professor of Materials Engineering, 1980-1987
US Office of Naval Research - Tokyo
Liaison Scientist, 1984-1985
Massachusetts Institute of Technology
Professor of Materials Engineering, 1987-
Professor of Engineering Systems, 2000-
Leaders for Manufacturing Professor, 1988-1993
~~Department Head, Materials Science and Engineering (Acting), March 1989~~
–August, 1989

3/16/12

Richard P. Simmons Professor of Materials Engineering, 1990-1993
Director, Materials Processing Center, 1991-1993
POSCO Professor of Materials Engineering, 1993-1999
Co-Director, Leaders for Manufacturing Program, 1993-1995
Department Head, Materials Science & Engineering, 1995-2000
Thomas Lord Professor of Materials Engineering and Engineering Systems, 2001-2005
Professor of Materials Engineering and Engineering Systems, 2005-

HONORS AND AWARDS:

International Junior Civitan of the Year, 1968
Dennison K. Bullens Scholarship, 1969-1971
Foundry Educational Foundation Scholarship, 1970-1971
Phi Lambda Upsilon, Member 1971
Tau Beta Pi, Member, 1971; Distinguished Service Award, 1980
National Science Foundation Graduate Fellowship, 1972-1974
Metallurgy and Materials Prize, Boston Section AIME, 1972
Adams Memorial Membership Award, American Welding Society, 1979-1983
Charles H. Jennings Memorial Medal, American Welding Society, 1983, 1991, 2003
Champion H. Mathewson Gold Medal, TMS-AIME, 1987
Henry Krumb Lecturer, TMS/SME-AIME, 1987
National Science Foundation Creativity Extension Award, 1988-1990
ASM International, Fellow, 1989
Houdremont Lecturer, International Institute of Welding, 1990
Warren F. Savage Award, American Welding Society, 1990, 1996
William Spraragen Award, American Welding Society, 1990, 1993
Comfort A. Adams Lecturer, American Welding Society, 1992
Henry Marion Howe Medal, ASM International, 1992
William Irrgang Award, American Welding Society, 1993
Leaders for Manufacturing Professorship, 1988-1993
Richard P. Simmons Professorship, 1990-1993
POSCO Professorship, 1993-1999
Thomas Lord Professorship, 2001-2005
American Welding Society, Fellow, 1994, Honorary Member, 1999
Nelson W. Taylor Lecturer, Pennsylvania State University, 1995
National Academy of Engineering, 1997
General Electric Distinguished Lecture, Rensselaer Polytechnic Institute, 2001
Silver Quill Award, American Welding Society, 2002
American Association for the Advancement of Science, Fellow, 2003
College of Engineering and Technology, Lecturer, Brigham Young University, 2004
MIT Naval Construction and Engineering Graduate Program Award, 2007
Plummer Lecturer, American Welding Society, 2008

ACTIVITIES:

~~National Academy of Engineering, Member, Nominating Committee Member~~
American Welding Society, Fellow and Honorary Member; *Welding Journal*, Principal Reviewer;

Professional Certification Committee
ASM International, Fellow
American Institute of Mining, Metallurgical and Petroleum Engineers, Member
Tau Beta Pi, Member, New England District Director 1977-1980, MIT Chapter Advisor, 1977-2001, Chief Advisor, 2002 -
American Association for the Advancement of Science, Fellow; Member, Electorate Nominating Committee, 2006-2009
Society of Automotive Engineers, Member
American Society of Mechanical Engineers, Member
American Society for Testing and Materials, Member
Registered Professional Engineer, Massachusetts Certificate Number 29726
Editorial Board, *Science and Technology of Welding and Joining*

SERVICE ON NATIONAL AND INTERNATIONAL LEVEL
National Research Council:
SR-1256 – Project Advisory Committee for Investigation of Steels for Improved Weldability in Ship Construction, member, 1978-1983
Unit Manufacturing Process Research Committee, member, 1991-1995
Department of Energy Panel on Integrated Manufacturing, member, 1994, 1996
Panel for Materials Science and Engineering, member, 1991-1996
Panel on Structural and Multifunctional Materials, 2000-2001
National Materials Advisory Board, 1998-2002
Committee on Future Needs in Deep Submergence Science, 2003-2004
Committee on New Directions in Manufacturing, 2002-2004
Board on Manufacturing and Engineering Design, 2003-2005
Advanced Technical Institute, Project Technical Representative, 2004-2006
Committee on Air Force/Department of Defense Aerospace Propulsion, 2005-2006
Panel on Armor and Armaments, 2007 -
Panel on Manufacturing Related Programs at NIST, 2011-2012

MIT Lincoln Laboratory – Red Team – Haystack W-Band Radar Upgrade, 2005-2006

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Province of Ontario, Canada: External Examiner, Doctoral Thesis of Wen Tan, 2004

University of Porto, Portugal: Doctoral Thesis Committee of Sergio Tavares, 2009
State of Indiana, 21st Century Research and Technology Fund, Project Review 2009
Jadavpur University, Kolkata, India External Examiner of Joydeep Maity, 2009

State of Massachusetts: Technical Advisor, State Plumbing Board

TEACHING EXPERIENCE:

Undergraduate:	Graduate:	Professional:
Thermodynamics	Kinetics	Materials Selection
Chemical Metallurgy	Thermodynamics	Welding and Joining Processes
Physical Metallurgy	Deformation Processing	Failure Analysis
Materials Processing	Welding and Joining Processes	Non-destructive Testing
Solid State Chemistry	Materials Selection	
Physical Chemistry	Product Design	
Essentials of Engineering	Case Studies in Naval Ship Construction Maintenance and Repair	
Colossal Failures in Eng'g		

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Thomas W. Eagar
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September 28, 2012

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No. 16684

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Standard Rate and Fee Schedule

Hourly rates:

Time accrued on projects is charged at a fixed hourly rate according to the following schedule:

Dr. Thomas. W. Eagar	$500
Senior Consultants	$200 to 250
Consultant	$150 to 200
Technical Support	$100 to 150
Administrative Support / Word Processing	$75 to 100

Expenses:

All direct project expenses including travel, supplies, subcontractor services and equipment rental fees will be billed at cost.

Eagar LLC's Additional Terms and Conditions:

1. **Execution of work and distribution**: Eagar LLC and, if applicable other subcontractors including MEG members, will work in accordance with generally accepted professional engineering practices. No other warranty, expressed or implied, is made concerning work performed under this Agreement. Eagar LLC's work product is for your sole use and cannot be distributed by you for the purpose of marketing, product design or product evaluation without a supplemental Agreement signed by both parties.

2. **Termination and legal obligations**: Work under this Agreement may be terminated by either party by sending a written notice of termination to the other party. In the event that you terminate this Agreement, you will not incur a cancellation fee but will be responsible for any time expended by Eagar LLC, whether or not previously billed by Eagar LLC, and expenses previously incurred by Eagar LLC or third parties, such as airfare, laboratory tests and other such expenses. In the event that Eagar LLC is compelled by subpoena or court order to produce documents or testify in connection with this subject matter in situations where Eagar LLC is not a party in the lawsuit, you agree to pay for time and expenses under this Agreement.

3. **Limitation of liability:** To the extent permitted by applicable law, in no event will either party be liable under any legal theory for any special, indirect, consequential, exemplary or incidental damages, however caused, arising out of or relating to this Agreement, even if such party has been advised of the possibility of such damages. Neither party's liability to the other party under this Agreement shall exceed the total amounts paid or payable by you under this Agreement.